



**STATE OF NEW HAMPSHIRE
GENERAL COURT**

**State Energy Policy Commission
HB1146, Chapter 257, Laws of 2006
SB140, Chapter 364, Laws of 2007**

2007 Interim Report

Prepared for:
Governor John H. Lynch
Senate President Sylvia Larsen
Speaker of the House Terie Norelli
Senate Clerk
House Clerk
State Librarian

December 1, 2007

Commission Members

Legislative Appointments:

Senator Peter Bragdon
Senator Martha Fuller Clark
Representative Gene Anderson
Representative Richard Barry
Representative Roger Berube

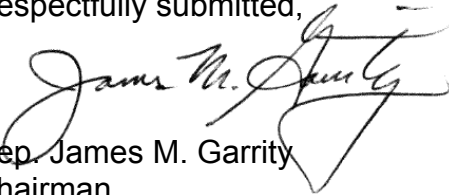
Representative David Borden
Representative Jacqueline Cali-Pitts
Representative James Garrity
Representative Naida Kaen
Representative Leigh Webb

Gubernatorial Appointments:

Thomas Kelly, PhD.
Harold T. Judd, Esq.

Amy Ignatius, Director, Office of Energy and Planning
Thomas B. Getz, Chairman, Public Utilities Commission
Meredith Hatfield, Consumer Advocate, Office of Consumer Advocate
Robert Scott, Air Resources Director, Department of Environmental Services

Respectfully submitted,


Rep. James M. Garrity
Chairman

Organization

The 2006 Laws of New Hampshire, Chapter 257, approved May 25, 2006, and the 2007 Laws of New Hampshire, Chapter 364, approved July 17, 2007 established and expanded the State Energy Policy Commission and charged it with the duty to study: the adequacy of electricity supplies to meet demand including, but not limited to consideration of the following issues: a) diversity of fuel supplies and availability, b) reliability of service, c) price to end-use customers, d) divestiture of PSNH generation assets, e) structure, effectiveness, and competitiveness of wholesale and retail markets, f) renewable portfolio standards, g) Federal Energy Regulatory Commission (FERC) and Independent System Operator (ISO) initiatives to promote increased capacity within the region, such as the forward capacity market initiative. h) protection of public health and the environment; energy efficiency opportunities and programs, in all forms of energy uses; promoting renewable energy, both for electrical production and as a heat and transportation fuel source; the adequacy of natural gas supplies and fuel diversity within the state and region; and the regulatory process for siting commercial wind energy facilities in the state and the economic, environmental, visual and ratepayer effects associated with such facilities; Whether the state should allow electric distribution companies to invest in small scale generation resources as part of a strategy for balancing load and distribution, reducing transmission line losses, minimizing transmission and distribution costs, improving energy conservation, and enhancing renewable energy; Demand management and response mechanisms and programs. The Commission was directed to report its findings and any recommendations for legislation in the form of an interim report by December 1, 2006, December 1, 2007 and a final report by December 1, 2008.

The members of the Commission are: Senators Peter Bragdon and Martha Fuller Clark; Representatives Gene Anderson, Richard Barry, Roger Berube, David Borden, Jacqueline Cali-Pitts, James Garrity, Naida Kaen and Leigh Webb ; gubernatorial appointments Thomas Kelly, PhD. and Harold T. Judd, Esq.; for the Office of Energy and Planning, Amy Ignatius, Director; for the Public Utilities Commission, Thomas B. Getz, Chairman; for the Office of Consumer Advocate, Meredith Hatfield, Consumer Advocate; and for the Department of Environmental Services, Robert Scott, Air Resources Director. The Commission elected Representative Garrity to serve as Chairperson at the re-organizational meeting held on August 7, 2007.

Proceedings to Date

On August 7, 2007, the Commission met to welcome its new members, review the Commission's findings from 2006, get updates from sub-committees, examine its expanded charter and prioritize which policy areas it wished to address, and in what order. The Commission agreed that short term study should include the concept of "distributed generation", possibly before the beginning of the 2008 legislative session.

On August 29, 2007, the Commission met jointly with the Energy Planning Advisory Board (EPAB), and the House and Senate energy policy committees for a day-long briefing by the ISO New England and NH Public Utilities Commission entitled *A Workshop on ISO New*

England Electricity Scenario Analysis & Transmission Planning for the Integration of Renewables. This workshop addressed electricity issues and challenges facing the state and region, including how the region might meet its future electric needs, how the current transmission planning process works, and what may need to change to better integrate new renewable electric generation facilities, such as those proposed for northern New Hampshire. There were both detailed presentations and a lively, interactive discussion of the issues. Copies of the presentations from the workshop are available on the website of the NH Public Utilities Commission; see the following web link.
http://www.puc.state.nh.us/Electric/Policy/Scenario_Analysis_and_Transmission.htm

On October 24, 2007, the Commission met to discuss the policy concept of Distributed Energy Generation, especially the possible deployment of small scale renewable energy resources to supplement the electricity grid. Unitil Corp., represented by Mr. Robert Schoenberger, President and CEO, and Mr. George Gantz, Senior Vice President, shared a presentation entitled *The Energy Challenge of the 21st Century: Distributed Energy Resources*. The presentation detailed such topics as: What Are Distributed Energy Resources (DER)?, What Are The benefits Of DER?, Barriers To DER, Overall Economics of DER. Unitil also shared its experiences with several pilot Distributed Energy projects it has been running, including a small scale wind turbine, ice storage, and small scale solar. The session included a healthy exchange of ideas among participants both during and after the presentation. The Commission concurred that this topic should continue to be explored.

At the November 15 meeting, with the Commission received the final report of its Wind Siting Sub-committee, from its Chairperson, Mr. Robert Scott. Mr. Scott reported that the sub-committee had voted to recommend a draft document to the full Commission for its consideration. The document, *Proposed Windpower Siting Guidelines*, had been developed by an ad-hoc working group of wind siting stakeholders, which had met many times since October 2006. After discussion, the Commission voted to: accept the document from the sub-committee for further consideration, host a public session in early 2008 to hear wider feedback from the public, post the draft document (in draft form) on the internet to give it the widest possible exposure before the public session and officially thank and commend the ad-hoc working group for its hard work in writing.

The Commission will next meet again early in January 2008 and will continue to address its individual study areas in more detail until December 2008.

Sub-committees

- Renewable Portfolio Standard (RPS) sub-committee was established in October 2006 to monitor and lend support to the RPS process in the legislature. Several Energy Policy Commission members (Sen. Fuller-Clark, Sen. Bragdon, Rep. Garrity and Rep. Borden) were sponsors of HB-873 of 2007, the RPS bill. It passed and was signed into law by the Governor on May 11, 2007.

- Commercial Wind Siting: Mr. Scott (Chair) – this sub-committee was established in October 2006. Several meetings were held from 2006 and through 2007. At the suggestion

of Mr. Scott, the sub-committee asked a group of stakeholders with interest in wind energy if they would be willing to meet and see if they could reach consensus on general guidelines for the siting of commercial wind energy facilities. This ad-hoc group was not an official part of the sub-committee, nor was it directed by the sub-committee. But the sub-committee felt that if this ad-hoc working group (composed of a broad range of individuals and interests, including wind developers, environmental and conservation groups, renewable energy advocates, and others) could reach some consensus on general principles, this could, in the long run, shorten the approval process should some of these principles become part of public policy.

During 2007, New Hampshire saw its first proposed commercial wind project come before the Site Evaluation Committee (SEC). The Lempster Wind Project proposal was an active case before the New Hampshire's Site Evaluation Committee. The Wind Siting Sub-committee monitored the progress of the docket, but was not able to discuss it in detail, because several of the sub-committee members also serve as members of the SEC. The Lempster project did receive SEC approval in June 2007. A copy of the final SEC decision is available on the website of the NH Public Utilities Commission; see the following web link to the document.

<http://www.puc.state.nh.us/Home/SEC%20Lempster%20Final%20Decision%206-28-07.pdf>

On September 26, 2007, the Wind Siting Sub-committee met with the major parties (including several members of the SEC) from the Lempster Wind Project docket to elicit their feedback on the recently completed Site Evaluation Committee process. Some thought the SEC process was efficient and liked its flexibility; others felt that tighter rules of procedure need to be introduced in the future. It was a very valuable session.

On November 15, 2007, the Wind Siting Sub-committee held its final meeting. At the meeting, it discussed and voted to forward a draft document to the full Commission for its consideration. The document, *Proposed Windpower Siting Guidelines*, had been developed by the above mentioned ad-hoc working group of wind siting stakeholders, which had met many times since October 2006.

- Energy Efficiency: a sub-committee was originally planned, but the Commission decided that energy efficiency is a topic that the entire Commission should study in earnest in 2008.

The Commission also decided that a committee of the whole should address the various issues related to the current state of restructuring, the divestiture of PSNH's generation assets, and electric competition generally.

Many of these topics are currently the subject of LSRs for the 2008 session and the ongoing efforts of the Commission or its sub-committees should not preclude consideration of commercial wind siting, energy efficiency, distributed generation, renewable power transmission or other related policy initiatives in the 2008 legislative session.

Finally, the Commission determined that the PUC should provide background material for inclusion in this Interim Report. It is found at Attachment A.

Guiding Energy Policy Pillars

The Commission reaffirmed a set of overarching guiding principles, or Policy Pillars, it had developed in 2006, and agreed they would be useful for evaluating current energy policy initiatives and designing the State's short-term and long-term strategic energy policy. The Commission reaffirmed the following Energy Policy Pillars and recommends that the Governor and Legislature use these Energy Policy Pillars to evaluate any new energy policy initiatives:

- Peak Energy Demand
 - *Goal is to meet peak demand (both electricity & transportation)*
- Fuel Diversity/Buffer Against Global Instability
 - *Reduce fossil fuel component of energy mix, promote use of renewables.*
- Environmental and Public Health Benefits
 - *Reduce undesirable emissions and climate change*
- System Reliability
 - *Energy transmission infrastructure must be dependable and reliable to encourage businesses to locate, remain, and expand in New Hampshire.*
- Consumer Price Stability
 - *Goal is to minimize spikes in energy prices.*
- Economic Benefits and Certainty
 - *Benefits to New Hampshire economy and long-term economic predictability.*

Looking Ahead to 2008: Major Policy Challenges

There are at least 25 energy-related pieces of proposed legislation filed for the 2008 legislative session (see Attachment B for a list). The Commission looks forward to continuing its work in 2008, and assisting the legislature in discussing, debating and reaching consensus on energy policy questions, including those highlighted below:

Distributed Energy Generation: should the state allow electric distribution utilities to invest in and develop distributed energy resources?

Transmission and Distribution Upgrades for renewable energy generation projects: Who should pay for the needed upgrades to the electric transmission and distribution system necessary for remotely-located renewable energy projects to come on line? Should the renewable developers pay? Should the rate-payers of New Hampshire or New England pay? Should the state pay? Should the transmission companies pay?

Energy Efficiency: What tools are available for the state to educate consumers and encourage investments in energy efficiency to lower our energy usage, reduce our peak demand, and realize the economic and environmental benefits of cost effective energy efficiency and other demand side management programs?

ATTACHMENT A

BACKGROUND MATERIALS

The Energy Policy Commission was tasked with the duty to study a number of issues and to report its findings and any recommendations. As described in the body of the Interim Report, several issues are currently the subject of examination by the Commission or by other agencies, committees or commissions. The Commission also determined that it would be useful to include in its Interim Report certain background materials, drawn from a variety of sources, in order to provide a general picture of specified study areas. This Attachment provides some current information regarding the adequacy of electric supply, diversity of fuel supply for electric generation, reliability of electric service, price of electricity to end-use customers, energy efficiency programs for electric customers, and adequacy of natural gas supply. Following is an abstract of the materials for each topic.

Adequacy of Electric Supply In its 2007 Regional System Plan, the New England Independent System Operator (ISO) reports that New England has adequate installed capacity to meet regional capacity needs through 2009. Further, the ISO is “optimistic that adequate demand and supply resources will be purchased and installed in time to meet the projected capacity needs and the resource adequacy requirements for 2010 and beyond.”

Diversity of Fuel Supply New England continues to rely heavily on fossil fuels for electric generation while natural gas has been replacing oil over time as the largest source of electric generation. New Hampshire has a very diverse fuel mix, although, consistent with the rest of the region, the most recent large-scale additions have been fueled by natural gas.

Reliability of Service Congress and the FERC, in the aftermath of the August 2003 Northeast Outage (which affected only the Southwestern Connecticut portion of New England), continue to implement mandatory national reliability standards. New Hampshire addresses distribution reliability through use of the System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI), and Customer Average Interruption Duration Index (CAIDI).

Price to End-Use Customers For years New Hampshire had the highest electric prices in New England and, at times, the highest prices in the nation by some measures. New Hampshire now has some of the lower electric prices in New England and the Northeast.

Energy Efficiency Programs The CORE energy efficiency programs funded by ratepayers through the System Benefits Charge serve all customers of PSNH, Unitil, National Grid and the NH Electric Cooperative. For the period June 2002 through December 2006, the programs have saved 4.3 billion lifetime kWh, which is equivalent to saving \$608 million. This represents a return for customers of more than \$7 for every \$1 invested in the programs. The programs have also reduced CO₂, SO₂, and NO_x emissions by 2.7 million tons.

Adequacy of Natural Gas Supply The natural gas distribution companies serving the Northeast report they have adequate natural gas supplies to meet customer needs. Natural gas supply and storage for the upcoming winter is currently higher than normal. As of late October, the national storage levels of natural gas were 8% above the 5-year average. For the long term, however, it is critical to diversify sources of supply and invest in efficiency programs.

Public Utilities Commission (PUC) and Site Evaluation Committee (SEC) Docket Monitoring

Arguably, every electric and natural gas proceeding before the Public Utilities Commission and the Site Evaluation Committee is relevant to some aspect of the Energy Policy Commission's duties. However, for the purposes of this interim report, only those proceedings related to energy efficiency and renewables are highlighted.

1. DE 06-061, Investigation of the Implementation Standards of the Energy Policy Act of 2005. The first phase of this proceeding has focused largely on "smart metering" and the appropriateness of implementing time-based rates for all customer classes. In response to various motions for rehearing filed in response to the Commission's June 22, 2007 order, a hearing was held in this docket on October 10, 2007.

2. DE 07-064, Energy Efficiency Rate Mechanisms. The Commission opened this proceeding in furtherance of the National Action Plan on Energy Efficiency to investigate the merits of instituting rate mechanisms, such as decoupling, that would have the effect of removing obstacles to, and encouraging investment in, energy efficiency and the scope has been expanded to include both electric and natural gas utilities. The docket has been proceeding informally and has included baseline presentations by the utilities on July 31 and presentations by a panel of subject matter experts on November 7, 2007.

3. DE 07-106, Core Energy Efficiency Programs. This docket concerns the annual filing by National Grid, the New Hampshire Electric Cooperative, Public Service Company of New Hampshire and Unitil seeking approval, for calendar year 2008, of the core programs funded by the system benefits charge authorized pursuant to RSA 374-F:3. The hearing in this proceeding is scheduled for December 17, 2007.

4. DRM 07-089, Renewable Portfolio Standards Rulemaking, Puc Chapter 2500. At its public meeting on November 21, 2007, the Commission adopted interim rules for implementing RSA Chapter 362-F, concerning the electric renewable portfolio standard. It also announced that it would be issuing an order of notice in January, 2008 to begin the process for adopting permanent rules.

5. The Site Evaluation Committee, pursuant to Senate Bill 140, has scheduled a public meeting for December 13, 2007, to vote whether to adopt initial proposed organizational and procedural rules.

ATTACHMENT B

ENERGY-RELATED LEGISLATIVE SERVICE REQUESTS FILED FOR 2008

Below is a list of proposed energy-related legislation filed for consideration by the New Hampshire legislature during the 2008 session. Some LSRs already have been assigned bill numbers. This list is current as of November 30, 2007. To view a complete list of 2008 LSRs, go to the following web link on the New Hampshire General Court web page:
<http://www.gencourt.state.nh.us/ie/lsrsearch/default.asp>

2008 Legislative Service Requests (LSR)

2008-H-2005-R

HB1355 exempting alternative and renewable fuels from the road toll.

2008-H-2008-R

HB1405 regulating outdoor wood-fired boilers.

2008-H-2029-R relative to the right to use of clotheslines.

2008-H-2066-R

HB1391 prohibiting the investment of state funds in the energy sectors of countries that have been identified by the United States Department of State as state sponsors of terrorism.

2008-H-2075-R

HB1417 relative to banning the sale of low-efficiency light bulbs.

2008-H-2134-R replacing the electricity consumption tax with an electricity generation tax.

2008-H-2165-R

HB1186 reducing the membership of 2 legislative oversight committees.

2008-H-2166-R relative to the regional greenhouse gas initiative and authorizing cap-and-trade programs for controlling carbon dioxide emissions.

2008-H-2229-R relative to the development of effective energy efficiency measures.

2008-H-2230-R relative to procedures of the site evaluation committee.

2008-H-2309-R

HB1220 establishing a commission to study the taxation of alternative fuel and electric-powered motor vehicles for the purpose of funding improvements to the state's highways and bridges.

2008-S-2313-R adding an energy section to zoning and planning master plans.

2008-H-2335-R requiring the public utilities commission provide cost recovery for construction of generation assets by Public Service Company of New Hampshire.

2008-H-2402-R

HB1249 relative to gasoline and diesel fuel prices.

2008-H-2457-R

HB1268 establishing a commission to study creating incentives for electricity conservation and efficiency by consumers.

2008-H-2481-R establishing an energy conservation and efficiency board.

2008-S-2664-R relative to gasoline and diesel fuel prices.

2008-S-2670-R establishing a commission to develop a plan for the expansion of transmission capacity in the north country.

2008-S-2712-R relative to the establishment of a statewide transportation policy.

2008-S-2847-R authorizing rate recovery for electric public utilities investments in distributed energy resources.

2008-H-2879-R relative to renewable energy generation incentive programs.

2008-H-2882-R relative to the adoption of national standards for biodiesel.

2008-H-2883-R relative to the state purchase of bioheat fuels.

2008-H-2884-R relative to licensing requirements for small quantity biodiesel producers and distributors.

2008-H-2885-R relative to the state purchase of biodiesel fuel.

2008-H-2886-R relative to continuing the study commission for production and distribution of biodiesel in New Hampshire.